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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/987,921

11/16/2001

Noboru Oshima

925-217

7939

7590

08/14/2002

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EXAMINER

VY, HUNG T

ART UNIT

PAPER NUMBER

2828

DATE MAILED: 08/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/987,921

Applicant(s)

OSHIMA ET AL.

Examiner

Hung T Vy

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2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16/11/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. In response to the communications dated 11/16/2001, claims 1- 7 are pending in this application.

### **Acknowledges**

2. Receipt is acknowledged of the following items from the Applicant.  
Information Disclosure Statement (IDS) filed on 11/16/2001 and made of record as Paper No. 2.

### **Foreign Priority**

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 11/28/2000.

### **Claim Rejections - 35 U.S.C. § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 7 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. patent No. U.S.6,396,864 to O'Brien et al. in view of Umeda et al, U.S. Patent No. 4,337,443.

Regarding to claim 1, 2, O'Brien et al. disclose a semiconductor laser device and method, comprising: an oxide (406) having a specified reflectance formed as a protective coating on light emitting end surfaces of a semiconductor laser chip; and layer (404) having a film thickness of 40 Å or less or 5 Å or more and 30 Å or less formed between at least one light emitting end surface and the oxide (See column 5, line 46 – 50).

However, O'Brien et al. does not disclose an Si film is the first layer but Umeda et al. disclose the semiconductor laser device, wherein the first layer is an Si film (6)( See column 6, line 45 – 48), the oxide constituting the protective coating is an  $\text{Al}_2\text{O}_3$  film (9), (see column 6, line 4 – 15) and the semiconductor laser device, wherein the semiconductor laser chip has an active layer (3) containing Al (column 6, line 36 – 38). The semiconductor laser device, wherein the Si film has purity of 99.99% or more (column 6, line 48 – 51)

With respect to claim 1 to 5, the patent 4,337,443 shows in figure 2. The limitations wherein claim 1 to 5 recites a semiconductor laser with passivation film wherein the reference shows all the element/ limitation for the device. For the reason of claim 1-5 recites the same or identical elements, it would have been obvious to one of

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ordinary skill in the art to use patent of device for a method for manufacturing the semiconductor laser device as claim 6, and 7.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify <sup>O'Brien et al</sup> to have the same element as invention as Si in the first layer and Al<sub>2</sub>O<sub>3</sub> film on second layer <sup>as taught by Umeda et al</sup> because those skilled in the art will recognize that such modification and variations can be made to get high perform without departing from the spirit of the invention.

#### Citation of Pertinent References

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to Umeda et al. disclose Semiconductor laser Device with Facet Passivation Film , U.S. Patent No. 4,337,443.

The patent to O'Brien et al. discloses Thermally Conductive Coatings For Light Emitting Devices, U.S. Patent No. 6,396,864.

The patent to Sasaki et al. disclose Semiconductor Laser Device Having Facets Provided With Dielectric Layers, U.S. Patent No. 4,599,729.

The patent to Garcia et al. disclose Semiconductor Laser End-Facet Coatings For Use Or Liquid Enviroments, U.S. Patent No. 4,510,607.

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### Conclusion


6. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung VY whose telephone number is (703) 605-0757. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul IP can be reached on (703) 308-3098. The fax numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

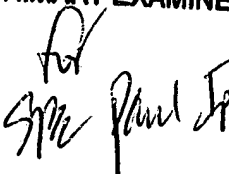
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-

0956.

  
Hung T. Vy  
Art Unit 2828

July 22, 2002

  
QUYEN LEUNG  
PRIMARY EXAMINER

  
Paul IP